General

Guideline Title

Bevacizumab in combination with gemcitabine and carboplatin for treating the first recurrence of platinum-sensitive advanced ovarian cancer.

Bibliographic Source(s)

National Institute for Health and Care Excellence (NICE). Bevacizumab in combination with gemcitabine and carboplatin for treating the first recurrence of platinum-sensitive advanced ovarian cancer. London (UK): National Institute for Health and Care Excellence (NICE); 2013 May. 43 p. (Technology appraisal guidance; no. 285).

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

- Bevacizumab in combination with gemcitabine and carboplatin is not recommended within its marketing authorisation, that is, for treating people with the first recurrence of platinum-sensitive advanced ovarian cancer (including fallopian tube and primary peritoneal cancer) who have not received prior therapy with bevacizumab or other vascular endothelial growth factor (VEGF) inhibitors or VEGF receptor-targeted agents.
- People currently receiving bevacizumab in combination with gemcitabine and carboplatin for treating the first recurrence of platinum-sensitive advanced ovarian cancer should be able to continue treatment until they and their clinician consider it appropriate to stop.

Clinical Algorithm(s)

This guidance has been incorporated into a NICE Pathway for ovarian cancer, available from the National Institute for Health and Care Excellence (NICE) Web site .

Scope

Disease/Condition(s)

Platinum-sensitive advanced ovarian cancer (first recurrence)

Guideline Category

Assessment of Therapeutic Effectiveness

Treatment

Clinical Specialty

Internal Medicine

Obstetrics and Gynecology

Oncology

Intended Users

Advanced Practice Nurses

Nurses

Physician Assistants

Physicians

Guideline Objective(s)

To assess the clinical effectiveness and cost-effectiveness of bevacizumab in combination with gemcitabine and carboplatin for treating the first recurrence of platinum-sensitive advanced ovarian cancer

Target Population

Women with recurrent, platinum-sensitive, advanced ovarian cancer

Interventions and Practices Considered

Bevacizumab in combination with gemcitabine and carboplatin (not recommended)

Major Outcomes Considered

- Clinical effectiveness
  - Progression-free survival
  - Overall survival
  - Objective response rate
  - Median duration of objective response
  - Adverse effects of treatment
- Cost-effectiveness

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Note from the National Guideline Clearinghouse (NGC): The National Institute for Health and Care Excellence (NICE) commissioned an independent academic centre to perform an assessment of the manufacturer's submission on the technology considered in this appraisal and prepare an Evidence Review Group (ERG) report. The ERG report for this technology appraisal was prepared by British Medical Journal Technology Assessment Group (BMJ-TAG) (see the "Availability of Companion Documents" field).

Clinical Effectiveness

Searches

The manufacturer's submission (MS) presents the search terms and strategies implemented in the manufacturer's review of the literature in August 2012. The manufacturer searched the literature to identify relevant randomised controlled trials (RCTs) and non-randomised studies assessing the clinical effectiveness of bevacizumab in the treatment of patients with recurrent ovarian cancer. Additionally, the MS presents search terms and strategies used to identify studies reporting on the safety and tolerability of bevacizumab, as well as terms for a search of studies to inform an indirect comparison of bevacizumab plus gemcitabine and carboplatin against other interventions of interest. The manufacturer highlights that the searches to identify RCT and non-RCT studies on clinical effectiveness and studies on safety and tolerability used the same initial search strategy.

The manufacturer listed the specific databases searched, the time period covered by the searches, and the date the searches were run. For the review of the literature on the clinical effectiveness of bevacizumab in combination with gemcitabine and carboplatin, the manufacturer supplemented the search by reviewing clinical abstracts from relevant conferences covering, as a minimum, the past 2 years (American Society of Clinical Oncology, Society of Gynecologic Oncology, European Cancer Organisation, European Society for Molecular Oncology, and European Society of Gynecological Oncology). As a result of the volume of studies evaluating comparators of interest listed in the scope issued by NICE, conference abstracts were not searched in the review to identify studies to inform the indirect comparison. Clinical trial registries and company databases were not searched. Within the searches, the manufacturer used multiple search terms for recurrent ovarian cancer and for bevacizumab. However, in the search strategy designed for the indirect comparison, search terms of comparators of interest were predominantly limited to the common drug name. It is not clear whether reference lists of identified RCTs were evaluated for additional suitable studies. The manufacturer restricted the search for studies on the clinical effectiveness of bevacizumab to citations published after 1st January 2001; restriction applied to all databases, with the exception of the Cochrane Library, for which there was no limitation on date. As bevacizumab was first approved in 2004, the ERG considers that the imposed restriction of the span of the search is unlikely to have resulted in relevant publications being missed.

In summary, the ERG considers that the manufacturer searched the key electronic databases, including MEDLINE, EMBASE, and the Cochrane Library, and that the search strategies used were appropriate for the decision problem that is the focus of this Single Technology Appraisal (STA).

Due to time constraints, the ERG was unable to replicate the manufacturer's search and appraisal. However, the ERG carried out a separate search of MEDLINE and the Cochrane Library in November 2012 using the manufacturer's search terms, and considers that all studies relevant to the clinical effectiveness of bevacizumab in the treatment of recurrent ovarian cancer are likely to have been identified.

Inclusion/Exclusion Criteria Used in Study Selection

Inclusion/exclusion criteria applied by the manufacturer for the systematic review of the literature to identify RCT evidence on the clinical effectiveness of bevacizumab and to identify studies to inform an indirect comparison are summarised in Table 5 of the ERG (see the "Availability of Companion Documents" field).

Eligibility criteria for the review of non-RCT evidence were the same as that for RCT evidence, with the exception of study design, as would be expected, which specified inclusion of non-RCT studies (≥200 patients).

For the review of the literature evaluating direct comparisons, the manufacturer restricted the population of interest to patients with platinum-sensitive disease that was the first recurrence of disease (i.e., treatment would be second-line). The intervention of interest is bevacizumab in combination with gemcitabine and carboplatin.

The ERG has concerns around the limitation placed on study design, in that only studies randomising a minimum of 200 patients would be included. On request, the manufacturer clarified that the rationale behind this decision was to focus on studies with a sufficient population size (i.e., at least 100 patients per arm) to provide robust efficacy data. The fundamental aim, and requirement, of a systematic review is to identify all original studies of acceptable quality that evaluate the defined therapeutic question. The ERG considers that applying the criterion of a minimum of 200 people would, thus, not fulfil the core requirement of a systematic review.

With reference to the criteria for outcomes, the ERG notes that the manufacturer has not listed health-related quality of life (HRQoL) as criteria for either inclusion or exclusion, which is listed as an outcome of interest to the decision problem. In the inclusion criteria for the indirect comparison, the manufacturer indicates that the only outcome of interest is progression-free survival (PFS).

See section 4.1.2 of the ERG report for additional information.

Cost-Effectiveness

The manufacturer carried out a systematic review of the literature to identify cost-effectiveness publications and economic evaluations on the use of bevacizumab in the treatment of relapsed or recurrent ovarian cancer from the perspective of the UK National Health Service (NHS). The electronic databases searched were: ProQuest MEDLINE and MEDLINE in-process; ProQuest MEDLINE; EconLit; and NHS Economic Evaluation Database (EED). In addition, the manufacturer searched the Tufts Cost-Effectiveness Analysis (CEA) registry, a database of 3,115 cost-utility analyses. The search was carried out in August 2012 and was not restricted by date, publication type, or study design. The manufacturer provided details of the search strategy, inclusion and exclusion criteria, and data extraction tables.

The manufacturer's review identified a total of nine publications, of which two were considered initially relevant for the submission. The manufacturer then concluded that neither study was relevant for the purposes of the submission. The ERG notes that the studies did not report sufficient details of modelling methods or sources of data used, and were, therefore, of limited use to inform the economic evaluation.

The ERG notes that the search terms used in the manufacturer's searches of the cost-effectiveness literature limited results to studies that included bevacizumab as an intervention. The ERG considers that this restriction was likely to have limited the cost-effectiveness evidence retrieved. A search without restriction on therapy would have ensured the identification of previous economic evaluations within recurrent ovarian cancer, and, in particular, previous health technology appraisals (HTAs) that could inform model structure and parameters.

To supplement the search carried out by the manufacturer, the ERG conducted a basic search of Ovid MEDLINE, Ovid EMBASE, EconLit and NHS EED for cost effectiveness studies in relapsed or recurrent ovarian cancer using simple terms for recurrent ovarian cancer and economic evaluation. The search did not limit inclusion to studies that included bevacizumab as an intervention. The ERG's search identified seven additional studies (see Table 25 of the ERG report [see the "Availability of Companion Documents" field] for information on cost-effectiveness papers identified by the ERG's literature search).

Number of Source Documents

Clinical Effectiveness

- One randomised controlled trial (RCT) and five associated conference abstracts were included for direct comparison.
- Three additional RCTs were included for indirect comparison.

Cost-Effectiveness

- The Evidence Review Group (ERG) identified 7 studies.
- The manufacturer submitted an economic model.
- The ERG undertook and exploratory and sensitivity economic analyses.

Methods Used to Assess the Quality and Strength of the Evidence

Expert Consensus

Rating Scheme for the Strength of the Evidence

Not applicable

Methods Used to Analyze the Evidence

Meta-Analysis

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

Description of the Methods Used to Analyze the Evidence

Note from the National Guideline Clearinghouse (NGC): The National Institute for Health and Care Excellence (NICE) commissioned an independent academic centre to perform an assessment of the manufacturer's submission on the technology considered in this appraisal and prepare an Evidence Review Group (ERG) report. The ERG report for this technology appraisal was prepared by British Medical Journal Technology Assessment Group (BMJ-TAG) (see the "Availability of Companion Documents" field).

Clinical-Effectiveness

Description and Critique of Manufacturer's Approach to Quality Assessment

Direct Comparison

The manufacturer assessed the OCEANS trial against criteria adapted from guidance for undertaking reviews in health care issued by the Centre for Reviews and Dissemination, as provided in NICE's template for manufacturer/sponsor submission of evidence to the Single Technology Appraisal (STA) process. The ERG independently validated OCEANS and predominantly agrees with the manufacturer's assessment; the manufacturer's assessment, with accompanying minor comments from the ERG, is presented in Appendix 2 of the ERG report (see the "Availability of Companion Documents" field). Evidence on the clinical effectiveness of bevacizumab is appropriately derived from OCEANS. A more detailed critique of the conduct of OCEANS is presented in Section 4.1.6 of the ERG report.

Indirect Comparison

Although the manufacturer decided against carrying out a network meta-analysis (NMA), quality assessments for the three additional trials identified were provided within the MS: CALYPSO; ICON4; and AGO-OVAR-2.5. The ERG independently validated the trials and agrees with the manufacturer's assessments of the quality of the trials; the manufacturer's assessments, with accompanying minor comments from the ERG, are presented in Appendix 3 of the ERG report (see the "Availability of Companion Documents" field). The manufacturer's rationale for not carrying out an NMA is discussed in greater detail in Section 4.3 of the ERG report.

Indirect Comparisons Between Bevacizumab Chemotherapy Regimen and Comparators Listed in the Final Scope (Exploratory Work on Clinical Effectiveness Undertaken by the ERG)

Results of the Exploratory Network Meta-Analysis

The ERG used a Bayesian Markov Chain Monte Carlo simulation in WinBUGS to conduct the NMA. The median hazard ratios (HRs) and accompanying confidence intervals (CIs) for progression-free survival (PFS) used in the analysis were taken from the full publications of the identified trials and are reported in Table 19 (randomised controlled trials [RCTs] described in the manufacturer's submission [MS]) and Table 20 (RCTs initially excluded by the manufacturer based on trial size) of the ERG report (see the "Availability of Companion Documents" field). The linear NMA was carried out using a fixed effects model. The ERG chose a fixed effects model because of the limited data available. In a random effects model, the between study heterogeneity generated would reflect the prior value inputted into the model as there are insufficient trial data to further inform this estimate.

The ERG's exploratory analyses suggest that, for the outcome of PFS, addition of bevacizumab to gemcitabine plus carboplatin is associated with a statistically significant improvement in duration of PFS compared with all comparators of interest in the final scope, including paclitaxel plus carboplatin (HR 0.47; 95% Credible Interval [CrI]: 0.33 to 0.66); results of the linear NMA are presented in Table 21 of the ERG report.

Although the ERG considers the analysis to represent a methodologically robust assessment, it should be stressed that the analysis is exploratory, and, as such, the results should be interpreted with caution. In addition, the ERG is uncertain about the direction of overall bias in the analysis.

See Section 4 of the ERG report (see the "Availability of Companion Documents" field) for more information on methods used to analyse clinical effectiveness.

Cost-Effectiveness

Summary and Critique of Manufacturer's Submitted Economic Evaluation by the ERG

Table 26 and Table 27 of the ERG report (see the "Availability of Companion Documents" field) summarise the ERG's quality assessment of the

manufacturer's economic evaluation. Table 26 summarises the ERG's appraisal of the manufacturer's economic evaluation against the requirements set out in the NICE reference case checklist for a base case analysis. Table 27 summarises the ERG's appraisal of the quality of the manufacturer's economic evaluation using the Philips checklist.

The ERG's main criticism of the submitted economic evaluation was the use of September 2010 OCEANS clinical effectiveness, cost, and adverse event incidence data, rather than data from March 2012 (where available). The ERG believes that the use of data from September 2010 may have introduced uncertainty in the estimates of the incremental cost-effectiveness ratio (ICER) and, in particular, may have overestimated the overall survival (OS) benefit associated with bevacizumab. In addition, the ERG notes that omission of comparison with the full list of comparators outlined in the NICE scope was a key limitation of the analysis.

Model Structure

The manufacturer developed a *de novo* semi-Markov cost-utility model with three health states (PFS, progressed disease [PD], and death), which used a cycle length of 1 week (see Figure 3 of the ERG report). The model was populated with clinical trial data from OCEANS study and compared the addition of bevacizumab to gemcitabine and carboplatin in the treatment and maintenance of women with recurrent, platinum-sensitive ovarian cancer. The model followed an average cohort through a base case model time horizon of 10 years. The model was constructed in Microsoft© Excel.

Rather than estimating the probability of transitioning between health states, the manufacturer estimated the proportion of patients located in the PFS and PD health states each week from OCEANS clinical trial data for PFS and OS.

The manufacturer stated that "the model structure is fully aligned with two of the primary objectives of treatment in advanced ovarian cancer; namely, prolonging life [and] delaying disease progression". The manufacturer also adds that "this model structure and the health states utilised are typical of modelling in metastatic oncology and have been utilised in numerous NICE appraisals including those specifically in advanced ovarian cancer". The ERG notes that this conclusion is consistent with the findings from the supplementary cost-effectiveness literature search conducted by the ERG, and the ERG agrees that this model structure is appropriate to describe the decision problem.

Perspective and Time Horizon

The economic evaluation was undertaken from the perspective of the National Health Service (NHS) and Personal Social Services (PSS), and considered a 10-year time horizon in the base case.

The ERG considers that a 10-year time horizon is of sufficient duration to capture differences in costs and consequences associated with the addition of bevacizumab in the treatment pathway. Moreover, the ERG considers that a 10-year time horizon is likely to represent a lifetime time horizon for most patients in the model. The ERG notes that time horizon was varied in sensitivity analyses.

See Section 5 of the ERG report (see the "Availability of Companion Documents" field) for more information on cost-effectiveness analysis.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Considerations

Technology appraisal recommendations are based on a review of clinical and economic evidence.

Technology Appraisal Process

The National Institute for Health and Care Excellence (NICE) invites 'consultee' and 'commentator' organisations to take part in the appraisal process. Consultee organisations include national groups representing patients and carers, the bodies representing health professionals, and the manufacturers of the technology under review. Consultees are invited to submit evidence during the appraisal and to comment on the appraisal documents.

Commentator organisations include manufacturers of the products with which the technology is being compared, the National Health Service (NHS) Quality Improvement Scotland and research groups working in the area. They can comment on the evidence and other documents but are not asked to submit evidence themselves.

NICE then commissions an independent academic centre to review published evidence on the technology and prepare an 'assessment report'. Consultees and commentators are invited to comment on the report. The assessment report and the comments on it are then drawn together in a document called the evaluation report.

An independent Appraisal Committee then considers the evaluation report. It holds a meeting where it hears direct, spoken evidence from nominated clinical experts, patients and carers. The Committee uses all the evidence to make its first recommendations, in a document called the 'appraisal consultation document' (ACD). NICE sends all the consultees and commentators a copy of this document and posts it on the NICE Web site. Further comments are invited from everyone taking part.

When the Committee meets again it considers any comments submitted on the ACD; then it prepares its final recommendations in a document called the 'final appraisal determination' (FAD). This is submitted to NICE for approval.

Consultees have a chance to appeal against the final recommendations in the FAD. If there are no appeals, the final recommendations become the basis of the guidance that NICE issues.

Who Is on the Appraisal Committee?

NICE technology appraisal recommendations are prepared by an independent committee. This includes health professionals working in the NHS and people who are familiar with the issues affecting patients and carers. Although the Appraisal Committee seeks the views of organisations representing health professionals, patients, carers, manufacturers and government, its advice is independent of any vested interests.

Rating Scheme for the Strength of the Recommendations

Not applicable

Cost Analysis

Summary of Appraisal Committee's Key Conclusions on the Manufacturer's Economic Model

Availability and Nature of Evidence

The manufacturer submitted a *de novo* economic analysis that assessed the cost-effectiveness of bevacizumab plus carboplatin and gemcitabine compared with placebo plus carboplatin and gemcitabine for treating people with advanced, recurrent, platinum-sensitive ovarian cancer. The model was a 3-state semi-Markov model with health states consisting of progression-free survival (PFS), progressed disease and death.

The Committee concluded that the model adhered to the National Institute for Health and Care Excellence (NICE) reference case for economic analysis and was acceptable for assessing the cost-effectiveness of bevacizumab plus gemcitabine and carboplatin for treating recurrent advanced ovarian cancer.

Uncertainties Around and Plausibility of Assumptions and Inputs in the Economic Model

The Committee acknowledged that there were potential shortcomings with some of the assumptions used in the manufacturer's economic model and considered some alternatives (that is, using a higher utility value for the PFS state, including a disutility for adverse events or using the Kaplan–Meier data for PFS) but it concluded that these would not be likely to have a significant effect on the incremental cost-effectiveness ratio (ICER).

The Committee concluded that overall survival was the biggest driver of the cost-effectiveness estimate.

Incorporation of Health-Related Quality-of-Life Benefits and Utility Values/Have Any Potential Significant and Substantial Health-Related Benefits Been Identified That Were Not Included in the Economic Model, and How Have They Been Considered?

The Committee noted that health-related quality-of-life data were not collected in the OCEANS trial. It agreed that health-related quality-of-life data collected in the trial would have been preferable for deriving the utilities for the economic model. It also noted that the estimates of utility for the PFS and progressed-disease health states were derived from a previous model submitted to NICE (Trabectedin for the treatment of relapsed ovarian cancer [NICE technology appraisal guidance 222]). The Committee agreed that it may be plausible for a larger decrement in utility to occur when a person moves from the progression-free health state to a progressed-disease health state and that the difference in utility between the PFS state and progressed state used by the manufacturer could be an underestimate. It also noted that a disutility associated with adverse events was not applied and that there were more serious adverse events in the bevacizumab arm than in the placebo arm.

Are There Specific Groups of People for Whom the Technology Is Particularly Cost-Effective?

None. The Committee noted that the cost-effectiveness estimates for bevacizumab plus gemcitabine and carboplatin were outside the range normally considered to be a cost-effective use of National Health Service (NHS) resources. It therefore concluded that bevacizumab plus gemcitabine and carboplatin would not be a cost-effective use of NHS resources for treating the first recurrence of platinum-sensitive advanced ovarian cancer compared with gemcitabine and carboplatin alone.

What Are the Key Drivers of Cost-Effectiveness?

The Committee concluded that overall survival was the biggest driver of the cost-effectiveness estimate and that, in principle, it would have liked to have seen a sensitivity analysis from the manufacturer that used the March 2012 data, which would have resulted in a higher ICER than the base case.

Most Likely Cost-Effectiveness Estimate (Given as an ICER)

The Committee agreed that the manufacturer's base-case ICER, using the September 2010 overall survival data of £149,000 per quality-adjusted life-year (QALY) gained, was likely to be an optimistic cost-effectiveness estimate and that the most plausible ICER could be much higher than this.

Method of Guideline Validation

External Peer Review

Description of Method of Guideline Validation

Consultee organisations from the following groups were invited to comment on the draft scope, Assessment Report and the Appraisal Consultation Document (ACD) and were provided with the opportunity to appeal against the Final Appraisal Determination.

- Manufacturer/sponsors
- Professional/specialist and patient/carer groups
- Commentator organisations (without the right of appeal)

In addition, individuals selected from clinical expert and patient advocate nominations from the professional/specialist and patient/carer groups were also invited to comment on the ACD.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of evidence supporting the recommendations is not specifically stated.

The Appraisal Committee considered clinical and cost-effectiveness evidence submitted by the manufacturer of bevacizumab and a review of this submission by the Evidence Review Group (ERG). For clinical effectiveness, one randomised controlled trial (RCT) was the main source of evidence. For cost-effectiveness, the manufacturer's model and 7 cost-effectiveness studies identified by the ERG were considered.

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Appropriate recommendation for the use of bevacizumab in combination with gemcitabine and carboplatin for treating the first recurrence of platinum-sensitive advanced ovarian cancer

Potential Harms

The summary of product characteristics lists the following adverse reactions that may be associated with bevacizumab treatment: gastrointestinal perforations, fistulae, wound healing complications, hypertension, proteinuria, arterial and venous thromboembolism, haemorrhage, pulmonary haemorrhage or haemoptysis, congestive heart failure, posterior reversible encephalopathy syndrome, hypersensitivity or infusion reactions, osteonecrosis of the jaw, ovarian failure and neutropenia.

For full details of adverse reactions and contraindications, see the summary of product characteristics available at http://emc.medicines.org.uk/ .

Qualifying Statements

Qualifying Statements

- This guidance represents the views of the National Institute for Health and Care Excellence (NICE) and was arrived at after careful consideration of the evidence available. Healthcare professionals are expected to take it fully into account when exercising their clinical judgement. However, the guidance does not override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer.
- Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this guidance should be interpreted in a way that would be inconsistent with compliance with those duties.

Implementation of the Guideline

Description of Implementation Strategy

The National Institute for Health and Care Excellence (NICE) has developed a tool to help organisations put this guidance into practice. This tool is available from the NICE Web site : a costing statement explaining the resource impact of this guidance.

Implementation Tools

Clinical Algorithm

Foreign Language Translations

Patient Resources

Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Patient-centeredness

Identifying Information and Availability

Bibliographic Source(s)

National Institute for Health and Care Excellence (NICE). Bevacizumab in combination with gemcitabine and carboplatin for treating the first recurrence of platinum-sensitive advanced ovarian cancer. London (UK): National Institute for Health and Care Excellence (NICE); 2013 May. 43 p. (Technology appraisal guidance; no. 285).

Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2013 May

Guideline Developer(s)

National Institute for Health and Care Excellence (NICE) - National Government Agency [Non-U.S.]

Source(s) of Funding

National Institute for Health and Care Excellence (NICE)

Guideline Committee

Appraisal Committee

Composition of Group That Authored the Guideline

Committee Members: Dr Jane Adam (*Chair*), Department of Diagnostic Radiology, St George's Hospital; Professor Iain Squire (*Vice Chair*), Consultant Physician, University Hospitals of Leicester; Professor A E Ades, Professor of Public Health Science, Department of Community Based Medicine, University of Bristol; Professor Thanos Athanasiou, Professor of Cardiovascular Sciences and Cardiac Surgery and Consultant Cardiothoracic Surgeon, Imperial College London and Imperial College Healthcare NHS Trust; Dr Jeremy Braybrooke, Consultant Medical Oncologist, University Hospitals Bristol NHS Foundation Trust; Dr Gerardine Bryant, General Practitioner, Heartwood Medical Centre, Derbyshire; Dr Fiona Duncan, Clinical Nurse Specialist, Anaesthetic Department, Blackpool Victoria Hospital, Blackpool; Mr Andrew England, Lecturer in Medical Imaging, NIHR Fellow, University of Liverpool; Professor Jonathan Grigg, Professor of Paediatric Respiratory and Environmental Medicine, Barts and the London School of Medicine and Dentistry, Queen Mary University London; Dr Brian Hawkins, Chief Pharmacist, Cwm Taf Health Board, South Wales; Dr Peter Heywood, Consultant Neurologist, Frenchay Hospital; Dr Sharon Saint Lamont, Head of Quality and Innovation, North East Strategic Health Authority; Dr Ian Lewin, Consultant Endocrinologist, North Devon District Hospital; Dr Louise Longworth, Reader in Health Economics, Health Economics Research Group, Brunel University; Dr Anne McCune, Consultant Hepatologist, University Hospitals Bristol NHS Foundation Trust; Professor John McMurray, Professor of Medical Cardiology, University of Glasgow; Dr Alec Miners, Lecturer in Health Economics, London School of Hygiene and Tropical Medicine; Dr Mohit Misra, General

Practitioner, Queen Elizabeth Hospital, London; Ms Sarah Parry, Central Nervous System Paediatric Pain Management, Bristol Royal Hospital for Children; Ms Pamela Rees, Lay Member; Dr Ann Richardson, Lay Member; Dr Paul Robinson, Medical Director, Merck Sharp & Dohme; Ms Ellen Rule, Programme Director, NHS Bristol; Dr Peter Sims, General Practitioner, Devon; Mr David Thomson, Lay Member; Dr John Watkins, Clinical Senior Lecturer/Consultant in Public Health Medicine, Cardiff University and National Public Health Service Wales; Dr Olivia Wu, Reader in Health Economics, University of Glasgow

Financial Disclosures/Conflicts of Interest

Committee members are asked to declare any interests in the technology to be appraised. If it is considered there is a conflict of interest, the member is excluded from participating further in that appraisal.

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available from the National Institute for Health and Care Excellence (NICE) Web site .

Availability of Companion Documents

The following are available:

- Bevacizumab in combination with gemcitabine and carboplatin for treating the first recurrence of platinum-sensitive advanced ovarian cancer. Costing statement. London (UK): National Institute for Health and Care Excellence (NICE); 2013 May 3 p. (Technology appraisal 285). Electronic copies: Available from the National Institute for Health and Care Excellence (NICE) Web site .
- Edwards SJ, Barton S, Thurgar E, Nherera L, Hamilton V, Karner C, Trevor N. Bevacizumab for the treatment of recurrent advanced ovarian cancer: a single technology appraisal. London (UK): British Medical Journal Technology Assessment Group (BMJ-TAG); 2012. 187 p. Electronic copies: Available from the NICE Web site .
- Ovarian cancer overview. NICE pathway. London (UK): National Institute for Health and Care Excellence (NICE); 2013 May. (Technology appraisal 285). Electronic copies: Available from the NICE Web site .

Patient Resources

The following is available:

- Bevacizumab with gemcitabine and carboplatin for treating the first recurrence of platinum-sensitive advanced ovarian cancer. Information for the public. London (UK): National Institute for Health and Care Excellence (NICE); 2013 May. 6 p. (Technology appraisal 285). Electronic copies: Available from the National Institute for Health and Care Excellence (NICE) Web site . Also available in Welsh from the NICE Web site .

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC Status

This NGC summary was completed by ECRI Institute on August 26, 2013.

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